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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/088,731	08/22/2002	Karl Heinz Schmid	C 2079 PCT/US	4546

23657 7590 04/19/2006

COGNIS CORPORATION
PATENT DEPARTMENT
300 BROOKSIDE AVENUE
AMBLER, PA 19002

EXAMINER

CHANNAVAJALA, LAKSHMI SARADA

ART UNIT	PAPER NUMBER
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1615

DATE MAILED: 04/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/088,731	SCHMID ET AL.	
	Examiner	Art Unit	
	Lakshmi S. Channavajjala	1615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-15, 17-21 and 23-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-15, 17-21 and 23-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Receipt of amendment and remarks dated 1-23-06 is acknowledged.

Claims 12-15, 17-21 and 23-31 are pending in the instant claims.

The following rejection of record has been maintained:

Claim Rejections - 35 USC § 103

Claims 12-14, 17-21 and 23-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,235,702 (US '702) in view of WO 96/15138 (WO) or over US 6,235,702 (US '702) by itself.

Instant claims 12-17 are directed to a composition comprising an alkyl and/or alkenyl oligoglycoside and a foam stabilizer selected from the group of dicarboxylic acid monoester, or dicarboxylic acid monoester salts or mixtures thereof. Claims 18-23 are directed to a process of enhancing the dermatological and ophthalmic mucus membrane combability of a cosmetic composition with the above compostion.

US '702 teach aqueous nacreous luster concentrate comprising an ester formed by reacting a hydroxy-functionalized carboxylic acid with a fatty alcohol containing 6 to 22 carbon atoms and an emulsifier selected from the nonionic, cationic and anionic, esterquat etc and a polyol (col. 2, lines 8-17). US '702 teaches that the carboxylic acid esters are prepared by esterification of carboxylic acids and containing 4 to 12 carbon atoms, having 2 to 4 carboxyl groups, with fatty alcohols. US '702 teaches suitable acids and fatty alcohols which are the same as that claimed, for preparing the esters (col. 2). US '702 further teach that the suitable nonionic surfactants including alkyl mono- and oligoglycoside containing 8 to 22 carbon atoms in the alkyl group and

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ethoxylated analogs thereof (col. 3, lines 12-14 and lines 47-60). US '702 also exemplifies a composition comprising tartaric monostearyl ester and cocoalkyl glycoside, which read on the instant components a) and b) (Table 1, composition R1). '702 do not specifically teach compositions containing a cosmetic or pharmaceutical active agent. However, '702 teach including auxiliaries or additives in the pearlescent composition comprising anti-dandruff agents, UV absorbers etc (col. 6, lines 8-16). Further, with respect to the method claims, the composition of '702 is being used for dermatological applications such as hair shampoos and other cosmetic purposes (col. 7, line 37 and col. 5, line 15). Therefore, it would have been obvious for one of an ordinary skill in the art at the time of the instant invention to use a combination of cosmetic or pharmaceutical active ingredients (such as fragrance, dyes or anti-dandruff agent, the latter meets both cosmetic and pharmaceutical actives) with the pearly luster carboxylic acid ester and alkyl oligoglycoside surfactants because US '702 suggests that while the carboxylic acid esters impart excellent pearlescent properties, brilliance even in smaller amounts and the nonionic surfactants improve the free-flowing nature of the pearly luster concentrate. US '702 also exemplify compositions with same number of carbon atoms in the esters and oligoglycoside (composition R2, Table 1) in the composition, but does not teach the claimed ratios of esters and oligoglycoside. '702 disclose a range of percentages of ester and oligoglycoside and accordingly optimizing the amounts of the pearlescent component and the amount of surfactant with an expectation to obtain the desired amount of pearlescence as well as a free-flowing composition would have been within the scope of a skilled artisan at the time of the

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instant invention. Further, '702 teach that the compositions are free flowing, biodegradable, impart valuable and rich appearance and therefore absent showing the compositions of '702 are compatible for cosmetic or dermatological purposes.

Alternatively, WO discloses a composition comprising alkyl polyglycoside, wherein the composition is used for cleaning hair and/or skin. WO teaches alkyl polyglycoside that is similar to that described in the instant application (page 7). In addition to alkyl polyglycoside, WO teaches an additive such as alkyl sulfate, carboxylic acids including their derivatives and salts, aliphatic sorbitan esters, Guerbet alcohols etc (page 6). WO does not teach dicarboxylic acid esters of the instant claims.

US '702, described above, teaches a pearly luster concentrate comprising the instant component a) as a suitable pearlescent agent, and a nonionic surfactant such as alkyl oligoglycoside, for increasing the free-flowing nature of the concentrate, when used in cosmetic compositions such as shampoos. Therefore, it would have been obvious for one of an ordinary skill in the art at the time of the instant invention to use the carboxylic acid ester of US '702, to impart pearly luster concentrate to the composition of WO containing alkyl oligoglycoside as nonionic surfactants because US '702 suggests that the carboxylic acid esters impart excellent pearlescent properties & brilliance even in smaller amounts and the nonionic surfactants improve the free-flowing nature of the pearly luster concentrate.

Response to Arguments

Examiner notes that applicants amended claims 12 and 18 to recite anionic surfactants and instant specification to replace "nonionic" with "anionic" to correct to correct the obvious error. Examiner acknowledges that the instant dicarboxylic acid monoesters and monoester salts are anionic in nature due to the presence of single ester group and a free carboxylic acid. Applicants also amended the claims as well as specification to delete "sorbic acid" because it is not a dicarboxylic acid.

Applicant's arguments filed 1-30-06 have been fully considered but they are not persuasive.

Applicants argue that the addition of the anionic surfactant, which is the monoester of a dicarboxylic acid, was not known as a foam stabilizer for alkyl or alkenyl oligoglycoside. It is argued that one skilled in the art would understand alkyl and alkenyl oligoglycosides are known as good foaming surfactants but the foam is not stable and the volume of foam is substantially reduced in a short time period after it is produced. It is argued that it is unexpectedly discovered by applicants that the addition of instant dicarboxylic acid esters enhances the foam stability, as set forth in the instant examples. It is argued that '702 teaches a pearlescent wax that is not a surfactant as it is insoluble in the composition in which it is added to impart a pearl like appearance. It is argued that to arrive at the instant, one would have to remove the pearlescent wax from the composition of '702 and substitute therefore with an anionic surfactant as claimed.

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Applicants argue that WO teaches an additive for alkyl polyglycosides for improved tactile properties and that none of the additives in WO are directed to the claimed monoester of dicarboxylic acid. It is argued that WO fails to cure the deficiencies of '702. Applicants' arguments are not persuasive because instant claims are directed to a composition and a method of increasing the compatibility of a cosmetic composition, but not to increase foam stabilization. Thus, the argument that the foam stabilization is not recognized by the prior art is a moot point. '702 teaches the same carboxylic acid esters as claimed and therefore, irrespective of their properties such as solubility, pearl-like effect or foam stabilization, the esters meet the claimed component B. Further, '702 teach a combination of the claimed esters and polyalkylglycoside and hence it would have been obvious for one of an ordinary skill in the art at the time of the instant invention to add the carboxylic acid esters of '702 to the composition of WO with an expectation to impart pearly luster concentrate to the composition of WO containing alkyl oligoglycoside as nonionic surfactants because US '702 suggests that the carboxylic acid esters impart excellent pearlescent properties & brilliance even in smaller amounts and the nonionic surfactants improve the free-flowing nature of the pearly luster concentrate. WO also states that alkyl polyglycosides forms a stable foam and that a foam stabilizing effect is exerted when combined with anionic surfactants (page 10, lines 2-12) and that the polyglycosides when used in combination with anionic surfactants in hair or personal care formulations result in low skin irritation. Applicants admit that the monoesters are anionic surfactants and even though '702 fails to recognize foam stability, the property of stabilizing is inherent to the esters of '702 and

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therefore the combination results in foam stability and low irritation (reads on the claimed compatibility).

The following is a new rejection:

Claim Rejections - 35 USC § 103

Claims 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,235,702 (US '702) in view of WO 96/15138 (WO), as applied to claims 12-14, 17-21 and 23-31, and further in view of US 3,703,481 ('481)

OR

Claims 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,235,702 (US '702) as applied to claims 12-14, 17-21 and 23-31, and further in view of US 3,703,481 ('481).

US '702 and WO discussed above fail to teach the claimed salts of monoesters of dicarboxylic acids.

'481 teach an aqueous composition comprising a detergent, water and an ammonium, alkanolamine or an alkali metal salt of monoesters of C3-C6 dicarboxylic acids with a fatty alkanolamide (abstract, col.1, lines 49-73; col. 2, lines 19-54). Examples of '481 directed to shampoos, skin cream, soap bar etc., recite the dicarboxylic acid esters that are claimed. '481 teach the above compounds for improving the emolliency, wetting, lathering etc., properties of the personal care compositions (col. 4, lines 20-40). Thus, it would have been obvious for one of an ordinary skill in the art at the time of the instant invention to use a metal salt or an

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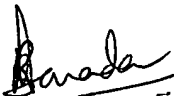
appropriate salt form of a monoester of a dicarboxylic acid in the composition of '702 or WO and still expect to achieve a free-flowing, biodegradable composition with an improved wetting, lathering (reads on improved foam) and emolliency with low irritation to skin (reads on the method of enhancing compatibility).

No claim is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lakshmi S. Channavajjala whose telephone number is 571-272-0591. The examiner can normally be reached on 9.00 AM -6.30 PM

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman K. Page can be reached on 571-272-0602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Lakshmi S Channavajjala
Examiner
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